



Shell Spirax S3 AX 80W-90

High Performance, GL-5 Axle Oil for General Applications

Shell Spirax S3 AX 80W-90 is a high performance, API GL-5 gear and axle oil for moderate to heavily loaded on and off-road driveline applications requiring SAE 80W-90 oil.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

▪ Multiple vehicle applications

High performance fluid for API GL-5 applications that may require SAE 80W-90, 90, or 80W fluids. May be used in some SAE 75W-90 applications where low temperature performance is not needed.

▪ Longer oil drain capability

Long life additives ensure long-term protection of the gears and high oxidation resistance so providing extended drain capability.

▪ Longer transmission life

Outstanding pitting, scoring and wear protection.

Main Applications



▪ Automotive differentials

Automotive gearboxes, differentials and hypoid gear sets in motorcycle, passenger car, commercial vehicles, off-road construction and agricultural equipment.

▪ General gear sets

Ancillary equipment gear sets and some industrial equipment.

Specifications, Approvals & Recommendations

- DTFR 12B130
- MAN: 342 Type M2
- ZF TE-ML 05A, 12E, 16C, 17B, 19B, 21A
- API Service Classification : GL-5
- US Military : MIL-L-2105D
- Shell Spirax S3 AX 80W 90 meets the service fill requirements of DTFR sheet 12B100.
- Exceeds the requirements of API GL-5, MT-1.

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

Typical Physical Characteristics

Properties	Method	Shell Spirax S3 AX 80W-90
SAE Viscosity Grade	SAE J 306	80W-90
Kinematic Viscosity @40°C	mm ² /s	169
Kinematic Viscosity @100°C	mm ² /s	16.8
Density @15°C	kg/m ³	900
Flash Point (COC)	°C	220
Pour Point	°C	-30

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

Health, Safety & Environment

▪ Health and Safety

Shell Spirax S3 AX 80W-90 is unlikely to present any significant health or safety hazard when properly used in the

recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Safety Data Sheet, which can be obtained from <https://www.epc.shell.com>

▪ **Protect the Environment**

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Additional Information

▪ **Advice**

Advice on applications not covered here may be obtained from your Shell representative.